

REMARKS/ARGUMENTS

The amendments set out above and the following remarks are believed responsive to the points raised by the Office Action dated September 28, 2007. In view of the amendments set out above and the following remarks, reconsideration is respectfully requested.

The Pending Claims

Claims 6 and 13 have been canceled, and claims 1-5, 7-12, and 14-23, remain pending.

Claims 1 and 2 have been amended to describe the invention more clearly. No new matter has been added, the basis for the amended claim language may be found within the original specification, claims and drawings.

Claims 1 and 2 are supported at, for example, paragraph [0055]. Entry of the above is respectfully requested.

Allowable Subject Matter

Applicants are pleased to note the Office Action indicates claims 19-23 are allowable over the prior art of record.

The Office Action

For convenience, the following remarks will address the rejections in the same order they were raised in the Office Action.

Claims 6 and 13 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. According to the Office Action, claim 6 was incomplete in not positively claiming the thickness, pressure drop, and porosity, and claim 13 is incomplete regarding the retention efficiency of the present membrane and/or the retention efficiency of the compared prior art membrane.

In order to expedite matters, claims 6 and 13 have been canceled, thus rendering the rejection moot.

Claims 1-4, 7, 9, 10, and 14-16 were rejected under 35 USC 102 as anticipated by U.S. Patent 4,248,924 to Okita (hereinafter referred to as "Okita"); claims 1-4 and 9 were rejected under 35 USC 102 as anticipated by U.S. Patent 6,712,919 to Ruefer et al. (hereinafter referred to as "Ruefer et al."); claims 5, 11, 12, and 18 were rejected under 35 USC 103(a) as being unpatentable over Okita, and alternately, in view of U.S. Patent 3,953,566 to Gore (hereinafter referred to as "Gore"); and claims 8 and 17 were rejected under 35 USC 103(a) as being unpatentable over Okita as applied to claim 1 above, and further in view of U.S. Patent 5,814,405 to Blanca et al. (hereinafter referred to as "Blanca et al.").

Each of these rejections is respectfully traversed.

Claims 1 and 2 have been amended to clarify the claim terms "free fibrils" and "free nodes," respectively. Thus, "free fibrils" have "at least two ends, one of which is attached to a node, and at least one other end which is unattached to a node" (claim 1), and "free nodes" have "free fibrils attached, the free fibrils having at least two ends, one of which is attached to a free node, and at least one other end which is unattached to a node" (claim 2).

As described in the present application, subjecting a membrane to an internal cleavage, e.g., splitting a parent membrane sheet into two membranes comprising porous fluoropolymer membranes according to an embodiment of the invention, creates new surfaces wherein each of the new surfaces have a greater number of free fibrils, or a greater number of free nodes as well as free fibrils, per unit area than the other surfaces (*see, for example*, paragraphs [0041], [0054], [0056], and Figure 1).

There is simply no disclosure in any of Okita, Ruefer et al., Gore, or Blanca et al. of one surface of a porous fluoropolymer membrane having a greater number of "free fibrils" or "free nodes" per unit area of the surface as compared to the other surface, as claimed in amended claims 1 and 2.

For example, with respect to Okita, while the Office Action refers to "the asymmetric film configuration," col. 1, lines 35-68, and the Figures, Okita merely teaches that in "the

case of uniaxial stretching, the nodules in the back surface shown in FIG. 1 become long and slender independently” (Okita, col. 3, lines 20-23; *see also*, the present application at paragraph [0032] and [0040] indicating that a parent membrane can be stretched monoaxially or biaxially before cleaving the membrane to produce porous fluoropolymer membranes according to embodiments of the invention). There is no disclosure of one surface of a porous fluoropolymer membrane having a greater number per unit area than the other surface of “free fibrils having at least two ends, one of which is attached to a node, and at least one other end which is *unattached to a node*” (claim 1, emphasis added), and “free nodes having free fibrils attached, the free fibrils having at least two ends, one of which is attached to a free node, and at least one other end which is *unattached to a node*” (claim 2, emphasis added).

With respect to Ruefer et al., while the Office Action refers to the “asymmetric expanded PTFE” of Ruefer et al., and states that the “properties claimed for the membrane in claims 1-4 are inherent of the asymmetric membrane structure,” Ruefer et al. merely teaches a multi-layered sheet of two or more layers of separately extruded resins of differing expandability (Ruefer et al., col. 3, lines 38-40, as well as col. 4, lines 9-45; *see also*, the present application at paragraph [0032] and [0040] indicating that a parent membrane can be stretched monoaxially or biaxially before cleaving the membrane to produce porous fluoropolymer membranes according to embodiments of the invention). There is no disclosure of one surface of a porous fluoropolymer membrane having a greater number per unit area than the other surface of “free fibrils having at least two ends, one of which is attached to a node, and at least one other end which is *unattached to a node*” (claim 1, emphasis added), and “free nodes having free fibrils attached, the free fibrils having at least two ends, one of which is attached to a free node, and at least one other end which is *unattached to a node*” (claim 2, emphasis added).

The porous fluoropolymer membrane of the present invention is patentably distinct from that of Okita and Ruefer et al. for the reasons set forth above. The facts that Gore may teach microporous membrane with a thickness, and Blanca may teach a copolymer, are of no import. Gore and Blanca simply do not cure the deficiencies of Okita and Ruefer et al., and therefore, the combination also fails to render the present invention obvious.

Accordingly, Okita, Ruefer et al., Gore, or Blanca et al., whether taken individually, or in combination, fail to anticipate or suggest the porous fluoropolymer membrane claimed in claims 1-5, 7-12, and 14-23, and thus, the rejections cannot be maintained.

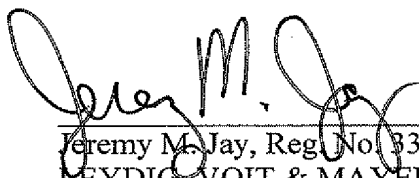
Since the independent claims are allowable for the reasons set forth above, the dependent claims are allowable as they depend from the novel and non-obvious independent claims.

For the reasons set forth above, reconsideration of the rejections is respectfully requested.

Conclusion

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



Jeremy M. Jay, Reg. No. 33,587
LEYDIG, VOIT & MAYER
700 Thirteenth Street, N.W., Suite 300
Washington, DC 20005-3960
(202) 737-6770 (telephone)
(202) 737-6776 (facsimile)

Date:

21 Dec. 2007